

REMARKS/ARGUMENTS

Applicant thanks the Examiner for the time he took to discuss this case and the claims amendments presented in this response. As discussed during the interview, Sholder and Peterson fail to support the rejections of the claims at least because the references do not teach or suggest detection of disrupted ventricular pacing and implementing a modified timing sequence responsive to the detection of disrupted ventricular pacing. Regarding the terminal disclaimers previously filed in this matter, Applicant is concurrently submitting a power of attorney with this response. The word “continuous” is used in conjunction with ventricular pacing in the specification, for example, at pages 2, 3, 4, and 13. Applicant believes that the words “consistent” and “continuous” may be used interchangeably to convey a pacing sequence that attempts to deliver ventricular pacing for substantially every cardiac cycle.

The rejections presented in the Office Action dated October 22, 2007 (hereinafter Office Action) have been considered. Claims 1-8, 11, 12, 14-17, 19-40, 43 and 44 remain pending in the application. Of these, claims 3, 4, 14-16, 20, 22, 23, 28, 29, 33-34, 37, and 44 are withdrawn from consideration. Claims 9, 10, 13, 18, 35, 41, and 42 are canceled. Claims 1-5, 11, 12, 14-16, 21-25, 30-32, and 36-40 have been amended. Reconsideration of the pending claims and allowance of the application in view of the present response is respectfully requested.

Claims 1, 2, 5-8, 11, 13, 17, 21, 24-27, 30, 36, 38-40 and 43 are rejected based on 35 U.S.C. §102(e) as being anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious in view of U.S. Patent No. 5,653,738 to Sholder (hereinafter “Sholder”). Claims 12, 19, 31 and 32 are rejected based on 35 U.S.C. §103(a) as being unpatentable over Sholder.

The Examiner maintains the rejections in view of Sholder, arguing Sholder teaches Applicant’s claimed invention. Applicant respectfully disagrees. Sholder teaches detection of PMT/PMRR, but these conditions do not disrupt ventricular pacing. PMT is a condition that involves uninterrupted pacing at such a high rate that the pacing is tachyarrhythmic.

Thus, PMRR/PMT is not a condition that disrupts ventricular pacing. PMT occurs when too much/too fast pacing occurs.

The technique described by Sholder is a technique that is used to interrupt the pacing which produces PMT. Applicant's claim 1, for example, includes detecting disrupted ventricular pacing. In contrast, Sholder does not teach detecting disrupted ventricular pacing, but teaches various processes for interrupting ventricular pacing to terminate PMT/PMRR.

Sholder does not teach or suggest a process that detects disrupted ventricular pacing and, responsive to the detection of the disrupted ventricular pacing, modifies the pacing timing sequence as recited in Applicant's independent claims 1, 21, and 36, for example. To restore ventricular pacing following detecting disrupted ventricular pacing, the modified pacing timing sequence may include a decreased PVARP. In direct contrast to Applicant's claims, Sholder teaches extending PVARP to block P-waves if PMRR is detected. (See, Sholder, col. 5, lines 29-32, col. 13, lines 54-60, Figure 9.1, element 200, col. 16, lines 4-6) Blocking P-waves inhibits implementing an AV delay to schedule a ventricular pace. Thus, the process described by Sholder would further disrupt ventricular pacing. Sholder does not teach or suggest detecting disrupted ventricular pacing and also does not teach or suggest modifying the pacing timing sequence responsive to the detection of disrupted ventricular pacing.

Sholder does not include all of the elements of Applicant's claims, therefore Sholder cannot support an anticipation rejection. Furthermore, because Sholder teaches a process intended to interrupt pacing rather than a process that is responsive to disrupted pacing, one skilled in the art would not be inclined to modify the teachings of Sholder as suggested by the Examiner. For at least these reasons, claims 1, 2, 5-8, 11-13, 17, 19, 21, 24-27, 30-32, 36, 38-40 and 43 are not anticipated or made obvious in view of Sholder.

Claims 1, 2, 5-8, 11-13, 17, 19, 21, 24-27, 30-33, 36, 38-40 and 43 are rejected based on U.S.C. §102(e) as anticipated by or, in the alternative, under 35 U.S.C. §103(a) as obvious over U.S. Patent No. 5,893,882 to Peterson et al. (hereinafter "Peterson").

Peterson also does not anticipate Applicant's claims or render the claims obvious at least because Peterson does not teach or suggest the elements of detecting disrupted ventricular pacing and, responsive to the detection of disrupted ventricular pacing, implementing a modified pacing sequence.

Peterson is directed to an approach for mode switching when atrial fibrillation is detected. If the AF evidence counter and mean P-P intervals achieve an atrial fibrillation criteria, then a mode switch to a non-atrial synchronous, ventricular rate stabilization mode is implemented. (See, for example, col. 29, lines 22-27 and 53-58). Peterson does not teach detecting disrupted ventricular pacing modifying the pacing sequence responsive to the detection of disrupted ventricular pacing to restore ventricular pacing as set forth in each of Applicant's independent claims. For at least these reasons, Peterson fails to anticipate Applicant's claims 1, 2, 5-8, 11-13, 17, 19, 21, 24-27, 30-33, 36, 38-40 and 43.

Claims 1, 2, 5-8, 11-13, 17, 19, 21, 24-27, 30-32, 36, 38-40 and 43 provisionally rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 3, 5, 14, 16, 17, 19, 22, 23, 28, 29 and 34 of copending application no. 10/794,323 and over claims 1, 2, 6-10, 15-19, 23-27, 31-34, 38-45, 47-49, 53 and 54 of copending application no. 10/794,151.

Applicant appreciates the Examiner pointing out that a power of attorney should be submitted in connection with the previously filed terminal disclaimers. Applicant is concurrently submitting an executed Power of Attorney under 37 C.F.R. §3.73(b) along with this response as suggested by the Examiner.

Authorization is given to charge Deposit Account No. 50-3581 (GUID.150DIV4) any necessary fees for this filing. If the Examiner believes it necessary or helpful, the Examiner is invited to contact the undersigned attorney to discuss any issues related to this case.

Respectfully submitted,

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